

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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Ex parte PETER J. PETIT

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Appeal No. 96-3796  
Application 08/195,397<sup>1</sup>

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ON BRIEF

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Before CALVERT, ABRAMS and GONZALES, Administrative Patent Judges.

CALVERT, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 11, 15, 22 to 27, 34 and 35, all the claims remaining in the application.

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<sup>1</sup> Application for patent filed February 14, 1994.

The claims on appeal are drawn to a reactor apparatus. As disclosed in the specification, impurities are removed from waste water by microorganisms supported on a substrate of particulate solids in the reactor tank. Claims 11 and 15 are reproduced in the appendix to the examiner's answer, and the rest of the appealed claims are set forth in the appendix to appellant's brief.

The references applied in the final rejection are:

Moseley (Moseley '169)	306,169	Oct. 7, 1884
Moseley (Moseley '171)	306,171	Oct. 7, 1884
Hickey et al. (Hickey '144)	4,177,144	Dec. 4, 1979
Hickey et al. (Hickey '033)	4,250,033	Feb. 10, 1981
Weisenbarger et al. (Weisenbarger)	4,543,186	Sep. 24, 1985

The claims on appeal stand finally rejected under 35 U.S.C. § 103 on the following grounds:<sup>2</sup>

- (1) Claims 11, 15 and 22 to 27, unpatentable over Hickey '144 in view of Weisenbarger;
- (2) Claims 34 and 35, unpatentable over Hickey '144 in view of Weisenbarger, Hickey '033 and Moseley.<sup>3</sup>

#### Rejection (1)

The basis of this rejection is stated on page 3 of the examiner's answer. We will consider this rejection with regard to independent claims 11, 15 and 22, seriatim.

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<sup>2</sup> An additional rejection of claims 11 to 13, under 35 U.S.C. § 102(b), was withdrawn in view of an amendment after final rejection (filed June 5, 1995), in which, inter alia, claim 11 was amended and claims 12 and 13 were canceled.

<sup>3</sup> The examiner evidently intended to apply both of the two cited Moseley patents in this rejection.

(a) Claim 11

Appellant argues, inter alia, that Hickey '144 does not disclose, and Weisenbarger would not have rendered obvious, the recited "adjustable means in said agitator line for shearing excess amounts of said material ..." The examiner states in his answer that this limitation is met by a valve, such as shown in Fig. 8 of Hickey '144.

We do not agree with the examiner. While Hickey '144 discloses various shearing means in the agitator line 29, such as static mixer 30A and sinuous path 29A, none of them is disclosed as adjustable. As for the valve (31) of Fig. 8, to which the examiner refers, Hickey '144 does not disclose that it is adjustable or performs a shearing function, unlike the throttle valve 94 disclosed by appellant. The only apparently adjustable shearing means in the agitator line 29 disclosed by Hickey '144 might be pump 30, but the "adjustable means" recited in claim 11 is not readable thereon because the claim also recites a pumping means in the agitator line.

The rejection of claim 11 will therefore not be sustained.

(b) Claim 15

This claim requires that the agitator line, pumping means and flow constricting means<sup>4</sup> be contained "within said separator column." Hickey '144 does not disclose that line 29, pump 30 and flow constrictor 29A or 30A are located in the separator column 17, and we find no disclosure in

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<sup>4</sup> We note that "said flow constricting means" in lines 20 and 21 has no antecedent basis. This informality should be corrected in subsequent prosecution.

Weisenbarger which would have suggested locating them in that position. Moreover, even if it might be concluded that such a location would have been obvious in view of Weisenbarger's Fig. 1 embodiment (analogizing casing 10 to the separator column), the agitator apparatus would not be removable from the tank without disconnection from the separator column, as claimed, because the disclosure of Weisenbarger that the pump 16, tube 36, etc., are attached to the casing 10 at adapter 18 would suggest to one of ordinary skill that the agitator apparatus of Hickey '144 be connected to separator column 17.

Accordingly, we will not sustain the rejection of claim 15.

(c) Claim 22

In this claim, the agitator circuit is recited as being "supported in said reactor tank" (emphasis added). We do not consider that it would have been obvious to one of ordinary skill, in view of Weisenbarger, to locate the Hickey '144 loop (i.e., withdrawal conduit and return conduit) and shearing means 29A or 30A in reactor tank 10. Since Weisenbarger does not disclose the use of any type of additional tubular member within casing 10, we consider that, at most, it may have been obvious to locate the agitator circuit of Hickey '144 within separator column 17, but in that case the agitator circuit could not be removed from the tank without disconnection from the separator column, as discussed above with regard to the rejection of claim 15.

The rejection of claim 22, and thus of claims 23 to 27 dependent thereon, will not be sustained.

Rejection (2)

We will not sustain the rejection of claim 34, since the additional secondary references, Hickey '033 and Moseley, do not overcome the deficiencies of Hickey '144 and Weisenbarger noted above as to parent claim 22.

We also will not sustain the rejection of claim 35. Assuming arguendo that it would have been obvious, in view of Hickey '033, to add a reduced-diameter bottom section extension to the bottom of separator column 17 of Hickey '144, we find nothing in either of the Moseley patents which would have suggested or motivated one of ordinary skill in the art to make such bottom section extension "telescopically received" in the bottom section, as required by claim 35. Considering the Moseley '169 patent, for example, the telescopic sections G<sup>1</sup> and G<sup>2</sup> extend upward so that the length of the pipe G can be adapted to the level of the upper end C of the liquid B in container A (page 2, lines 26 to 51). The examiner states on page 6 of the answer that Moseley's telescopic tubes "are obviously applicable for other level adjustability applications," but since the separator columns of both Hickey '144 and '033 are fixed in the tank and the reduced-diameter bottom extension C of Hickey '033 extends downwardly from the bottom of the separator column, it is not evident how the bottom extension would be involved in any level adjustability.

Conclusion

Appeal No. 96-3796  
Application 08/195,397

The examiner's decision to reject claims 11, 15, 22 to 27, 34 and 35 is reversed.

REVERSED

IAN A. CALVERT	)	
Administrative Patent Judge	)	
	)	
	)	BOARD OF PATENT
	)	APPEALS AND
NEAL E. ABRAMS	)	INTERFERENCES
Administrative Patent Judge	)	
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	)	
JOHN F. GONZALES	)	
Administrative Patent Judge	)	

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